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The Many Facets of Diamond at the University of Melbourne

Friday 3 September, 2:30 pm

Sala Wataghin, Istituto di Fisica, via P. Giuria 1

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Abstract

Diamond is a material of great interest around the world due to its extreme mechanical, chemical, optical, electrical and thermal properties. Additionally it is unique as a platform for room-temperature quantum information processing. This combination of properties is fueling an interest in advanced applications that promise to shape 21st-century technology. I will review work currently underway at the University of Melbourne using diamond, including: the bionic eye, magnetometry, single photon centers, device fabrication, as well as listing some of the facilities available.

The Author



Barbara Fairchild graduated with a double major in Chemistry at the University of Adelaide in 1992. Her current work investigates diamond as a material for micro optics and micro mechanics using ion implantation, TEM and EELS analysis.